

Title (en)
Device for treating bottles

Title (de)
Vorrichtung zum Behandeln von Flaschen

Title (fr)
Dispositif pour le traitement de bouteilles

Publication
EP 1659089 A1 20060524 (DE)

Application
EP 05025199 A 20051118

Priority
DE 102004055963 A 20041119

Abstract (en)
The device (1a) treats beverage bottles (2) with retaining ring (4) exhibiting catch and has a mechanism for removing or placing the retaining ring on the catch. The device has an opening for receiving the crown of the bottle.

IPC 8 full level
B67B 7/00 (2006.01); **B08B 9/30** (2006.01); **B26F 3/00** (2006.01); **B67B 5/00** (2006.01); **B67B 7/18** (2006.01); **B67B 7/40** (2006.01); **B67B 7/46** (2006.01); **B67C 3/24** (2006.01)

CPC (source: EP)
B67B 7/00 (2013.01); **B67B 7/18** (2013.01); **B67B 7/38** (2013.01); **B67B 7/40** (2013.01)

Citation (applicant)
EP 0513079 B1 19931208 - KRONSEDER HERMANN [DE]

Citation (search report)
• [X] EP 1359114 A1 20031105 - KHS MASCH & ANLAGENBAU AG [DE]
• [A] US 3689973 A 19720912 - LEENAARDS JOSEPH JACQUES
• [A] FR 2520285 A1 19830729 - SCHEIDEGGER ALBERT [FR]
• [A] DE 3422208 A1 19851219 - ALCOA GMBH MASCH [DE]
• [A] DE 2729980 B1 19781109 - ALCOA DEUTSCHLAND GMBH MASCHB
• [A] DE 3209805 A1 19830929 - GRAESSLE MASCHINENBAU [DE]
• [A] WO 0139901 A1 20010607 - DEWING GEORGE WALTER [ZA]

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1659089 A1 20060524; **EP 1659089 B1 20080305**; AT E388118 T1 20080315; DE 102004055963 A1 20060524; DE 502005003075 D1 20080417; SI 1659089 T1 20080630

DOCDB simple family (application)
EP 05025199 A 20051118; AT 05025199 T 20051118; DE 102004055963 A 20041119; DE 502005003075 T 20051118; SI 200530209 T 20051118